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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,150	03/23/2004	Tetsuya Kato	TAK-0396	3695

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EXAMINER	
GOMA, TAWFIK A	

ART UNIT	PAPER NUMBER
2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/807,150	KATO, TETSUYA	
	Examiner	Art Unit	
	Tawfik Goma	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 11/07/2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al (US 5724322) in view of Yamagami et al (US 5949746) and further in view of Katoh et al (US 7068581).

Regarding claim 1, Kondo discloses an apparatus for playback of a data storage disk of the type having a series of data streams (M1-M5, fig. 12b) and a TOC prerecorded in preassigned tracks thereon (UTOC, fig. 12A), the TOC on the disk listing the starting addresses of the data streams (fig. 13), characterized in that the playback apparatus comprises: a transducer for reading the prerecorded data streams and TOC on the disk by relatively scanning the tracks thereon (3, fig. 7); storage means connected to said transducer for rewritably storing the TOC read on the disk by said transducer (13, fig. 7 and col. 10 lines 66-67 through col. 11 lines 1-5); and data processing means connected to said transducer for creating an expanded TOC by adding an ending address of each data stream to the original TOC which has been stored on said storage means and for controlling the scanning motion of the transducer with respect to the disk according to the expanded TOC (11, fig. 7 and col. 17 lines 23-42), the expanded TOC being editable for causing said data processing means to play either whole or

some desired part of any desired one of the data streams (figs. 12a-12c and col. 17 lines 42-59). Kondo further discloses the apparatus characterized in that said data processing means comprises: input means for inputting instructions for editing the TOC that has been stored on said storage means (35, fig. 3b); ending address addition means for adding to the original TOC that has been stored on said storage means, as the ending address of each data stream, the starting address of the next data stream (A32-33, figs. 12A-12B and fig. 13); editing means for editing the expanded TOC on said storage means in response to the instructions that have been input on said input means (fig. 13 and 11, fig. 7); and control means for causing the data storage disk to be played according to the edited TOC on said storage means (col. 16 lines 30-34). Kondo fails to disclose each data stream being comprised of a series of frames each having a data region for storage of data and an address region for storage of the address of the frame in question in the track in question. In the same field of endeavor, Yamagami discloses providing each data stream with an address region for storing an address of the frame (Subcode, fig. 5) and a data region (Data, fig. 5). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus disclosed by Kondo by using it with a disk of the type wherein an address region is provided for the frame. The rationale is as follows: One of ordinary skill in the art would have been motivated to provide an address region for the frame in order to use the device with a pre-formatted disc that is capable of recording user data.

Further regarding claim 1, Kondo fails to disclose wherein the ending addresses of the data streams are not listed. In the same field of endeavor, Katoh discloses an optical recording medium wherein the ending addresses are not listed (fig. 6 and col. 5 lines 7-20). It would have

been obvious to one of ordinary skill in the art at the time of the applicant's invention to not list the ending addresses as in Katoh. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to not list the ending addresses in order to save the memory that would be used by an ending address information byte for each data sequence.

Regarding claim 3, Kondo further discloses the apparatus characterized in that said ending address addition means, said editing means and said control means are comprised of: a central processor unit connected to said input means (11, fig. 7 and 19, fig. 7); and a memory connected to said central processor unit and storing a program for creating the expanded TOC by adding the ending addresses and a program for editing the expanded TOC (13, fig. 7).

Regarding claim 4, Kondo further discloses the apparatus characterized in that said data processing means comprises: means for specifying any desired address intermediate the starting address and ending address of any desired one of the prerecorded data streams on the disk in order to divide the desired data stream into parts upstream and downstream (col. 17 lines 23-32), respectively, of the desired intermediate address; and means for introducing into the TOC on said storage means the desired intermediate address both as the ending address of the upstream division of the desired data stream and as the starting address of the downstream division of the desired data stream (figs. 12a-12c and 13-14 and col. 17 lines 33-35), and for introducing into the TOC on said storage means the ending address of the desired data stream as the ending address of the downstream division of the desired data stream (A25, fig. 14).

Regarding claim 5, Kondo further discloses the apparatus characterized in that said data processing means comprises, in order to enable the user to sequentially play back a plurality of

selected ones of the prerecorded data streams on the disk, means for storing on the TOC on said storage means the starting address of the most upstream one of the selected data streams as the starting address of the selected series of data streams (P-TNO1, A20, fig. 13), and for storing on the TOC on said storage means the ending address of the most downstream one of the selected data streams as the ending stream of the selected series of data streams (A31, P-TNO6, A31).

Regarding claim 7, Kondo discloses the apparatus further characterized in that said data processing means comprises, in order to inhibit the playback of part of any selected one of the prerecorded data streams on the disk, means for changing at least either of the starting and ending addresses of the selected data stream on the TOC on said storage means (col. 18 lines 40-65).

Regarding claim 8, Kondo discloses the apparatus further characterized in that said data processing means comprises, in order to enable the sequential playback of any selected first one of the prerecorded data streams on the disk and a second one that is immediately downstream of the first selected data stream, with a change in the point of transition between the two: means for specifying a desired address intermediate the starting and ending addresses of the second data stream; and means for storing the desired intermediate address on the TOC on said storage means as the ending address of the first selected data stream and as the starting address of the second data stream (col. 16 lines 64-67 through col. 17 lines 1-22).

Regarding claim 9, Kondo discloses the apparatus further characterized in that said data processing means comprises, in order to enable the sequential playback of any selected first one of the prerecorded data streams on the disk and a second one that is immediately downstream of the first selected data stream, with a change in the point of transition between the two: means

for specifying a desired address intermediate the starting and ending addresses of the first data stream; and means for storing the desired intermediate address on the TOC on said storage means as the ending address of the first selected data stream and as the starting address of the second data stream (A32, A33, fig. 12b).

Regarding claim 11, Kondo further discloses the apparatus characterized in that said data storage disk is a CD (col. 11 lines 18-26)

Regarding claim 12, Kondo further discloses the apparatus characterized in that said starting and ending addresses are the absolute addresses on the CD (fig. 10).

Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al (US 5724322) in view of Yamagami et al (US 5949746) and Katoh et al (US 7068581) and further in view of Yasuda et al (US 6501901).

Regarding claim 6, Kondo fails to disclose the apparatus characterized in that said data processing means comprises, in order to inhibit the playback of any selected one of the prerecorded data streams on the disk, means for erasing from the TOC the starting and ending addresses of the selected data stream. In the same field of endeavor, Yasuda discloses an apparatus for editing a TOC, wherein in order to inhibit the playback of a data stream, the starting and ending addresses are erased (fig. 9C). It would have been obvious to one of ordinary skill in the art to delete the starting and ending addresses from the TOC. The rationale is as follows: One of ordinary skill in the art would have been motivated to delete starting and ending addresses of a data stream in order to perform a skip or delete editing function to the playback.

Regarding claim 10, Kondo fails to disclose the apparatus further characterized in that said data processing means comprises the steps of switching the order of two data streams as claimed. In the same field of endeavor Yasuda discloses in order to enable the sequential playback of any selected two of the prerecorded data streams on the disk, with a change in the sequence of playback, means for storing, as the starting and ending addresses of a first selected data stream (F0, F2a, fig. 9d), the starting and ending addresses of a second selected data stream on the TOC on said storage means, and, as the starting and ending addresses of said second selected data stream (F3b, F1, fig. 9d), the starting and ending addresses of said first selected data stream on the TOC on said storage means (fig. 9d). It would have been obvious to one of ordinary skill in the art to perform the operation of storing the starting and ending addresses as claim. The rationale is as follows: One of ordinary skill in the art would have been motivated to store the starting addresses and ending addresses as claimed in order to perform a swapping operation by swapping the playback position of two of the data streams.

Response to Arguments

Applicant's arguments filed 11/07/2007 have been fully considered but they are not persuasive. Regarding applicant's arguments that Kondo fails to disclose providing, as the ending address of each data stream, the starting address of the next data stream, this argument is not persuasive because Kondo discloses that the starting address of the next data stream (i.e. A22, fig. 12b) is located at a location which corresponds to an ending address of the previous data stream (i.e. A21, fig. 12b). Applicant is correct in that Kondo also lists the ending address of the previous data streams in the TOC, but the ending addresses and the starting address of the next data stream are at equivalent locations in fig. 12b with no free areas or other segments

existing between the first data stream and the subsequent data stream (col. 15 lines 64-67). The new limitations to the claim, which requires not listing the ending locations of the data streams overcomes the previous rejection, but the arguments presented by applicant pertain to this new limitation and are moot in view of the new ground of rejection (Kato et al, as applied to claim 1 above).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tawfik Goma/
1/15/2008

/William Korzuch/
SPE, Art Unit 2627